

App. No. 09/821,664

Amdt. dated February 28, 2005

Reply to Office Action of October 27, 2004

REMARKS

The Applicants acknowledge, with thanks, receipt of the Office Action mailed October 27, 2004. Claims 1-22 were pending in the instant application. The Examiner has rejected claims 1, 6, 9, 11, and 17 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,775,273 to Kung et al. Claims 2, 3, and 4 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Kung in view of U.S. Patent No. 6,789,118 to Rao. Claims 5, 7, 12, and 16 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Kung in view of U.S. Patent No. 6,628,629 to Jorgensen. Claims 8, 10, 13, 14, and 15 were objected to as depending upon a rejected base claim, but would otherwise be allowable if rewritten in independent form, including all of the limitations of the parent claim. Claims 18-22 have been allowed.

Applicants have canceled claims 5, 7, 12 and 16. Applicants have amended claims 1-4, 6, 8-11, 13-15 and 17 to more accurately reflect that which Applicants believe to be the invention. Claim 1 has been amended to reflect the application of the instant invention to packet switching and in particular, to payload data unit switching. More particularly, claim 1 has been amended to claim a payload data unit switching engine of a payload data unit switching node. The switching engine includes a payload data unit traffic management database. The switching engine also includes a payload data unit traffic management processor that performs intensive traffic management computations in ensuing guaranteed levels of service and updates the payload data unit traffic database. In addition, the switching engine of claim 1 includes a payload data unit switching processor that switches payload data unit traffic based switching database entries subject to payload data unit traffic shaping criteria held in the traffic management database.

The Applicants respectfully submit that the allowable subject matter of claim 8, namely the communications between the two processors reflected in the updating of the payload data unit traffic management database and notification thereof, is inherently found in the language of amended claim 1. For example, Applicants believe that communications between the two processors is inherently demonstrated by the traffic management processor performing computations and updating the traffic management database, while the switching processor switches traffic based on the database entries held in the updated traffic management database. Therefore, Applicants respectfully submit that the limitations of original claim 8 have been

Appl. No. 09/821,664  
Amdt. dated February 28, 2005  
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inherently shown to have been incorporated into amended claim, thereby rendering claim 1, and each claim that depends therefrom, in condition for allowance.

Furthermore, Applicants respectfully submit that the similarities of amended claim 1 and allowed claim 18 also demonstrate the allowability of claim 1. As the Examiner indicated in the outstanding Office Action, original independent claim 18 was determined to be allowable. Claim 18 is directed to a method for enforcing service level agreements for data traffic flows conveyed by a data switching node. Applicants hereby respectfully submit that the allowable subject matter of original claim 18 is inherently present in amended claim 1. Claim 1 is directed to the protocol data unit switching engine that performs the method of claim 18. For example, claim 18 includes the data traffic management database of claim 1, as well as the data traffic management and switching processors. Allowed claim 18 further includes the same updating accomplished by the payload data unit switching engine of claim 1. Therefore, Applicants respectfully submit that amended claim 1 and claim 18 reflect a method and apparatus for performing the same, and thus claim 1 is allowable.

In addition to the amended language, Applicants respectfully submit that Kung fails to teach or suggest a payload data unit traffic management database, as claimed in claim 1. As the Examiner acknowledges in the rejection of dependent claim 2, "Kung does not teach a data traffic management database with resource utilization information". However, such a data traffic management database is expressly claimed in claim 1. The instant specification states, at page 6, lines 9-13 that "[t]he DTM DB [*data traffic management database*] may include...resource state information – examples of which are shown [in] FIG 2, FIG 3, and FIG 4", as well as, "storage of data traffic shaping heuristics – FIG 6". Thus, claim 1 claims a data traffic management database with resource utilization information, which is not taught or suggested by Kung.

Applicants further respectfully submit that the expressions "least cost routing" and "traffic shaping" are directed to two entirely different network communications processes. In the field of packet switching, the expression "traffic shaping", as used in the present application, relates to the variation with time of the amount of data conveyed at a particular point in a communications network. Contrarily, the expression "least cost routing", as used by Kung, designates the path followed by packets in a communications network. Therefore, as used by the Applicants, "traffic

App. No. 09/821,664  
Arndt, dated February 28, 2005  
Reply to Office Action of October 27, 2004

shaping" takes place on a chip, or in a switch at a particular point of the communications network, whereas the "least cost routing" employed by the Kung reference designates links that packets are to travel throughout the communications network, involving multiple pieces of equipment. Thus, Kung fails to teach or suggest the traffic shaping of the subject invention, thereby rendering Kung non-analogous art to the instant application. Applicants respectfully submit that none of the other cited references, alone or in combination, teach or suggest the claimed invention.

All remaining claims either depend from or are independently directed to allowable subject matter and are in condition for allowance.

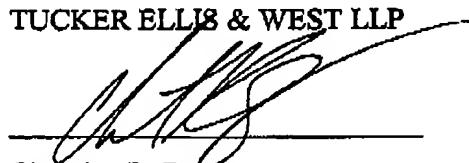
### CONCLUSION

In view of the foregoing, it is respectfully submitted that all present claims are patentably distinct over the art of record and in condition for allowance thereof. Applicants respectfully request that a timely Notice of Allowance be issued in this case. If the Examiner believes there are any further matters, which need to be discussed in order to expedite the prosecution of the present application, the Examiner is invited to contact the undersigned.

If there are any uncovered fees, or any overpayments, necessitated by the foregoing communication, please charge such fees to our Deposit Account No. 50-0902, referencing our Docket No. 64747-11926.

Respectfully submitted,

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